

# 1N957B THRU 1N982B

## Features

- Zener Voltage 6.8V to 75
- Silicon Planar Power Zener Diodes
- $V_Z$  – tolerance  $\pm 5\%$
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Moisture Sensitivity Level 1

## Mechanical Data

- Case: DO-35 glass case
- Marking : Cathode band and type number
- Weight: Approx. 0.13 gram

## Maximum Ratings

	Symbol	Value	Units
Zener Current		See Table 1	
Power Dissipation @ $T_A=25^\circ\text{C}$ (Note2)	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_J$	200	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{STG}}$	-65 to 200	$^\circ\text{C}$

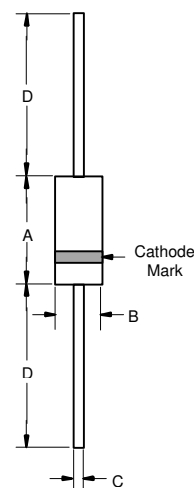
## Electrical Characteristics @ $25^\circ\text{C}$ Unless Otherwise Specified

	Symbol	Maximum	Unit
Thermal resistance	$R_{\theta JA}$	300	$^\circ\text{C}/\text{W}$
Forward Voltage @ $I_F=200\text{mA}$	$V_F$	1.5	V

**NOTE:** 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.  
2. Valid provided that a distance of 8mm from case are kept at ambient temperature

## 0.5W Silicon Planar Zener Diodes

### DO-35



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

# 1N957B thru 1N982B

MCC PART NUMBER	ZENER VOLTAGE <sup>3)</sup> @TEST CURRENT		MAXIMUM ZENER IMPEDANCE <sup>1)</sup>		MAXIMUM REVERSE LEAKAGE CURRENT TEST-VOLTAGE		MAXIMUM ZENER CURRENT	
	V <sub>Z</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub>	Z <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> <sup>2)</sup>	V <sub>R</sub>	I <sub>ZM</sub> <sup>2)</sup>
	V	mA	Ω	Ω	mA	μA	V	mA
1N957B	6.8	18.5	4.5	700	1.0	150	5.2	47
1N958B	7.5	16.5	5.5	700	0.5	75	5.7	42
1N959B	8.2	15	5.5	700	0.5	50	6.2	38
1N960B	9.1	14	5.5	700	0.5	10	6.9	35
1N961B	10	12.5	5.5	700	0.25	5	7.6	32
1N962B	11	11.5	5	700	0.25	5	8.4	28
1N963B	12	10.5	11.5	700	0.25	5	9.1	26
1N964B	13	9.5	13	700	0.25	5	9.9	24
1N965B	15	8.5	16	700	0.25	5	11.4	21
1N966B	16	7.8	17	700	0.25	5	12.2	19
1N967B	18	7.0	21	750	0.25	5	13.7	17
1N968B	20	6.2	25	750	0.25	5	15.2	15
1N969B	22	5.6	29	750	0.25	5	16.7	14
1N970B	24	5.2	33	750	0.25	5	18.2	13
1N971B	27	4.6	41	750	0.25	5	20.6	11
1N972B	30	4.2	49	1000	0.25	5	22.8	10
1N973B	33	3.8	58	1000	0.25	5	25.1	9.0
1N974B	36	3.4	70	1000	0.25	5	27.4	8.5
1N975B	39	3.2	80	1000	0.25	5	29.7	7.8
1N978B	51	2.5	125	1500	0.25	5	38.8	5.9
1N979B	56	2.2	150	2000	0.25	5	42.6	5.4
1N982B	75	1.7	270	2000	0.25	5	56	4.1

**Note:**

- 1) The Zener impedance is derived from the 1kHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I<sub>ZT</sub>) is superimposed on I<sub>ZT</sub>. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.
- 2) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.
- 3) Measured with device junction in thermal equilibrium.

## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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